

APPENDIX J: PRELIMINARY JURISDICTIONAL DELINEATION

DRAFT FOR REVIEW
16 NOVEMBER 2018



**PLACER COUNTY GOVERNMENT CENTER MASTER PLAN
UPDATE PRELIMINARY JURISDICTIONAL DELINEATION
PLACER COUNTY, CALIFORNIA**

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16 NOVEMBER 2018**

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ACRONYMS AND ABBREVIATIONS

Acronym/Abbreviation	Definition
ACOE	U.S. Army Corps of Engineers
County	Placer County
CWA	Clean Water Act
DB-	Detention Basin
ED-	Ephemeral Drainage
FEW-	Freshwater Emergent Wetland
NWI	National Wetland Inventory
OHWM	Ordinary high water mark
PCGC	Placer County Government Center
Porter-Cologne Act	Porter-Cologne Water Quality Control Act
SP-	Sampling Point
SW-	Seasonal Wetland
TNW	traditional navigable waters

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1 INTRODUCTION

This report documents the results of a preliminary jurisdictional delineation conducted for the Placer County Government Center Master Plan Update (project) located at the Placer County Government Center (PCGC), Placer County, California. The results of this delineation are preliminary until verified by the Sacramento District of the U.S. Army Corps of Engineers (ACOE).

1.1 Project Location

The project site (study area) is located west of State Highway 49 between Bell Road and Atwood Road and east of Deseret Drive in Placer County, California. The study area occurs in Section 32, Township 13 North, and Range 8 East of the U.S. Geological Survey Auburn 7.5' quadrangle. The approximate center of the study area corresponds to 38°56'17.92" north latitude and 121°06'33.22" west longitude (Figure 1).

The study area consists of approximately 180 acres of mostly developed land with several undeveloped lots that have been managed (mowed or disked) or turned into open space (such as parks or fields). Upon review of historical aerial photographs, many of these lots were previously developed with buildings constructed in the early 1940s. Several buildings were demolished between 2005 and 2008 as part of Placer County's (County's) implementation of the 2003 DeWitt Government Center Facility Plan (2003–2010), which was the prior master plan update for the study area.

1.2 Directions to the Study Area

The study area can be accessed from Bell Road off of State Highway 49. From Sacramento, travel east on Interstate 80 for 37 miles to Auburn, California. Take exit 119B from Interstate 80 onto State Highway 49. Travel 3.6 miles on State Highway 49, then turn left onto Bell Road, and then turn left onto 1st Street, where the entrance to the study area is located.

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2 PROJECT DESCRIPTION

The project proposes to update the 1993 Master Plan for the PCGC and to establish a long-term vision and ongoing facilities planning guide, which the County intends to employ for capital improvement projects on the PCGC campus with a 20-year planning horizon. The PCGC Master Plan Update will include a campus vision, development context and guiding principles, site and facilities assessment, facility utilization study, transportation and circulation planning, infrastructure and utilities planning, landscape and open space planning, an economic development study, site and facilities planning, zero net energy and water planning, and a phasing and implementation plan.

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3 REGULATORY BACKGROUND

3.1 Federal Statutes and Regulations – U.S. Army Corps of Engineers

Any person or public agency proposing to discharge dredged or fill material into waters of the United States, including jurisdictional wetlands, must obtain a permit from the ACOE.

As defined in Title 33 of the Code of Federal Regulations, Section 328.3, waters of the United States include all waters subject to interstate or foreign commerce, including tidal waters, interstate waters and wetlands, many intrastate waters, impoundments, tributaries, the territorial seas, and adjacent wetlands. Specifically, Section 328.3 of Title 33 of the Code of Federal Regulations defines waters of the United States as follows:

- a. For purposes of the Clean Water Act, 33 U.S.C. 1251 et seq. and its implementing regulations, subject to the exclusions in paragraph (b) of this section, the term “waters of the United States” means:
 - 1) All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
 - 2) All interstate waters, including interstate wetlands;
 - 3) The territorial seas;
 - 4) All impoundments of waters otherwise identified as waters of the United States under this section;
 - 5) All tributaries, as defined in paragraph (c)(3) of this section, of waters identified in paragraphs (a)(1) through (3) of this section;
 - 6) All waters adjacent to a water identified in paragraphs (a)(1) through (5) of this section, including wetlands, ponds, lakes, oxbows, impoundments, and similar waters.
- b. The following are not “waters of the United States” even where they otherwise meet the terms of paragraphs (a)(4) through (8) of this section.
 - 1) Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the Clean Water Act.
 - 2) Prior converted cropland. Notwithstanding the determination of an area’s status as prior converted cropland by any other Federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA.

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For non-tidal waters of the United States, the lateral limits of ACOE jurisdiction extend to the ordinary high water mark (OHWM) when no adjacent wetlands are present. Defined in the Code of Federal Regulations, Title 33, Section 328.3(e), the OHWM is “that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.” If adjacent wetlands are present, the jurisdiction extends to the limit of wetlands.

Wetlands are “those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” (33 CFR 328.3). Wetlands are jurisdictional if they meet this definition and the definition of waters of the United States. ACOE predominantly uses the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (ACOE 2008a) methodology to determine the presence of wetlands. According to the manual (ACOE 2008a), three criteria must be satisfied to classify an area as a wetland: (1) a predominance of plant life that is adapted to life in wet conditions (hydrophytic vegetation); (2) soils that saturate, flood, or pond long enough during the growing season to develop anaerobic conditions in the upper part (hydric soils); and (3) permanent or periodic inundation or soils saturation, at least seasonally (wetland hydrology). Further guidance for determining jurisdictional limits in ephemeral riverine systems in the Arid West is detailed in *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (ACOE 2008b).

In the last two decades, two major court cases have affected the jurisdictional reach of Section 404 of the Clean Water Act (CWA): (1) *Solid Waste Agency of Northern Cook County v. United States Corps of Engineers*, and (2) *Rapanos v. United States* and *Carabell v. United States Army Corps of Engineers*.

Solid Waste Agency of Northern Cook County v. United States Corps of Engineers

In 1986, in an attempt to clarify the reach of its jurisdiction, ACOE stated that Section 404(a) of the CWA extends to intrastate waters (51 FR 41217):

- a. which are or would be used as habitat by birds protected by Migratory Bird Treaties; or
- b. which are or would be used as habitat by other migratory birds which cross state lines; or
- c. which are or would be used as habitat for endangered species; or
- d. used to irrigate crops sold in interstate commerce.

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In 2001, the U.S. Supreme Court, in its judgment on the *Solid Waste Agency of Northern Cook County* case, held that Code of Federal Regulations, Title 33, Section 328.3(a)(3), as clarified and applied to the *Solid Waste Agency of Northern Cook County* site pursuant to the Migratory Bird Rule (51 FR 41217), exceeded the authority granted to ACOE under Section 404(a) of the CWA. Therefore, ACOE may not rely on the Migratory Bird Rule to establish a “significant nexus” to interstate or foreign commerce. In additional language, the U.S. Supreme Court majority opinion reasoned that these types of waters required some nexus to navigable waters. Although no formal guidance was issued by ACOE interpreting the extent to which the *Solid Waste Agency of Northern Cook County* decision would limit jurisdictional determinations, in practice, ACOE considers intrastate waters as waters of the United States where there is an appropriate connection to navigable water or other clear interstate commerce connection (*Solid Waste Agency of Northern Cook County v. United States Corps of Engineers* 2001).

Rapanos v. United States and Carabell v. United States Army Corps of Engineers

In 2006, the U.S. Supreme Court again issued an opinion on to what extent ACOE had jurisdiction over certain waters under Section 404 of the CWA. The *Rapanos-Carabell* consolidated decisions addressed the question of jurisdiction over attenuated tributaries to waters of the United States, as well as wetlands adjacent to those tributaries (*Rapanos v. United States* 2006).

ACOE and the U.S. Environmental Protection Agency issued guidance related to the *Rapanos* decision on June 5, 2007. The guidance identifies the waters the agencies (i.e., ACOE and the U.S. Environmental Protection Agency) will assert jurisdiction over categorically and on a case-by-case basis, based on the reasoning of the *Rapanos* opinions. In summary, ACOE will continue to assert jurisdiction over the following:

- Traditional navigable waters (TNWs) and their adjacent wetlands.
- Non-navigable tributaries of TNWs that are relatively permanent (e.g., tributaries that typically flow year-round or have a continuous flow at least seasonally) and wetlands that directly abut such tributaries (e.g., not separated by uplands, berm, dike, or similar feature).

Note: Relatively permanent waters do not include ephemeral tributaries, which flow only in response to precipitation, and intermittent streams, which do not typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months).

- Non-relatively permanent waters, if determined (on a fact-specific analysis) to have a significant nexus with a TNW, including non-navigable tributaries that do not typically flow year-round or have continuous flow at least seasonally, wetlands adjacent to such tributaries, and wetlands adjacent to but that do not directly abut a relatively permanent, are non-navigable tributary. Absent a significant nexus, jurisdiction is lacking.

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A significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or an insubstantial effect on the chemical, physical, and/or biological integrity of a TNW. Principal considerations when evaluating significant nexus include volume, duration, and frequency of the flow of water in the tributary and the proximity of the tributary to a TNW, including hydrologic, ecologic, and other functions performed by the tributary and all of its adjacent wetlands. Certain ephemeral waters in the Arid West are distinguishable from the geographic features described previously, where such ephemeral waters are tributaries and have a significant nexus to downstream TNWs. For example, these ephemeral tributaries may serve as a transitional area between the upland environment and the TNW. These ephemeral tributaries may provide habitat for wildlife and aquatic organisms in downstream TNWs and support nutrient cycling, sediment retention and transport, pollutant trapping and filtration, and improvement of water quality.

Swales or erosional features (e.g., gullies and small washes characterized by low-volume, infrequent, or short-duration flow) are generally not considered waters of the United States because they are not tributaries or they do not have a significant nexus to downstream TNWs. In addition, ditches (including roadside ditches) excavated wholly in and draining only uplands, and that do not carry a relatively permanent flow of water, are generally not considered waters of the United States because they are not tributaries or they do not have a significant nexus to downstream TNWs. Even when not jurisdictional under Section 404 of the CWA, these features may still be jurisdictional at state or local levels, such as under Section 401 of the CWA, the Porter-Cologne Water Quality Control Act (Porter-Cologne Act), and/or Section 1602 of the California Fish and Game Code.

Prior to the *Rapanos* guidance, ACOE required its regional districts to request concurrence for only those jurisdictional determinations where the district was planning to assert jurisdiction over a non-navigable, intrastate isolated water and/or wetland. The agencies now require that all determinations for non-navigable, isolated waters be evaluated for ACOE and U.S. Environmental Protection Agency headquarters review prior to the district making a final decision on the jurisdictional determination.

U.S. Army Corps of Engineers—Regulated Activities

ACOE regulates activities under Section 404 of the CWA that involve a discharge of dredged or fill material, including but not limited to grading, placing riprap for erosion control, pouring concrete, laying sod, and stockpiling excavated material into waters of the United States. Activities that generally do not involve a regulated discharge (if performed specifically in a manner to avoid discharges) include driving pilings, providing some drainage channel maintenance activities, and excavating without stockpiling.

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3.2 State of California

California Department of Fish and Wildlife

Pursuant to Section 1602 of the California Fish and Game Code, the CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake that supports fish or wildlife.

In Title 14 of the California Code of Regulations, Section 1.72, the California Department of Fish and Wildlife defines a “stream” (including creeks and rivers) as “a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having a surface or subsurface flow that supports or has supported riparian vegetation.”

In Title 14 of the California Code of Regulations, Section 1.56, the California Department of Fish and Wildlife’s definition of “lake” includes “natural lakes or man-made reservoirs.” Diversion, obstruction, or change to the natural flow or bed, channel, or bank of any river, stream, or lake that supports fish or wildlife requires authorization from CDFW by means of entering into an agreement pursuant to Section 1602 of the Fish and Game Code.

California Regional Water Quality Control Board

Pursuant to Section 401 of the federal CWA, the Regional Water Quality Control Board regulates discharging waste, or proposing to discharge waste, within any region that could affect a “water of the state” (California Water Code, Section 13260(a)), pursuant to provisions of the Porter-Cologne Act. Waters of the state are defined as “any surface water or groundwater, including saline waters, within the boundaries of the state” (California Water Code, Section 13050(e)). Before ACOE will issue a CWA Section 404 permit, applicants must receive a CWA Section 401 Water Quality Certification from the Regional Water Quality Control Board. If a CWA Section 404 permit is not required for the project, the Regional Water Quality Control Board may still require a permit (i.e., Waste Discharge Requirement) for impacts to waters of the state under the Porter-Cologne Act.

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4 METHODOLOGY

4.1 Literature Review

Prior to conducting fieldwork, the following available resources were reviewed to assess the potential for jurisdictional features:

- 1:200-scale aerial photograph (Bing Maps 2016; Google Earth 2016)
- U.S. Geological Survey 7.5-minute topographic quadrangle (USGS 2016)
- U.S. Department of Agriculture Natural Resources Conservation Service Web Soil Survey (USDA 2016a)
- National Wetland Inventory (USFWS 2016a)

4.2 Jurisdictional Delineation

Potential wetland waters of the United States were delineated based on methodology described in the 1987 *Corps of Engineers Wetlands Delineation Manual* (ACOE 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (ACOE 2008a). Non-wetland waters of the United States are delineated based on the presence of an ordinary high water mark (OHWM), as determined using the methodology in *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (ACOE 2008b). Dudek biologists collected photographic records that represent the on-site habitats and wetlands (Appendix A).

4.3 Flora

All plant species encountered during the field surveys were identified and recorded. Those species that could not be immediately identified were brought into the laboratory for further investigation. Latin names follow the *Jepson Interchange List of Currently Accepted Names of Native and Naturalized Plants of California* (Jepson Flora Project 2016), and common names follow the U.S. Department of Agriculture Natural Resources Conservation Service Plants Database (USDA 2016b). Appendix B contains a complete list of plant species observed during the field surveys.

4.4 Field Survey

The study area was surveyed on August 10, 2016, by Dudek Biologists Laura Burris and Tera Stoddard to document current site conditions and assess potential wetlands and other waters of the United States. Sample points were taken when necessary to assess the potential for hydric soils, hydrophytic vegetation, and hydrology. The results are presented in Section 6, Results of Survey.

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5 PHYSICAL CHARACTERISTICS

5.1 Land Uses

The study area is bounded on the east by residential and commercial developments and State Highway 49. It is bounded on the north by Bell Road and developed and undeveloped land. To the southwest, the study area abuts undeveloped open space, and to the south, it is bounded by Atwood Road (Figure 2). The study area includes the perimeter of the PCGC, which is managed by the County and encompasses a wide variety of County facilities.

5.2 Soils and Topography

According to the U.S. Department of Agriculture Natural Resources Conservation Service (2016a), three soil types are mapped within the study area and include Auburn silt loam, 2% to 15% slopes; xerorthents, cut and fill areas; and Auburn-Rock outcrop complex, 2% to 30% slopes (Figure 3). The majority of the study area consists of Auburn silt loam, and these soils are well-drained residuum weathered from metamorphic rock. Xerorthents consist of mechanically removed and mixed soil material in which horizons are no longer discernable. These soils are typically well drained. Auburn-Rock outcrop complex soils are found on rocky side slopes of metamorphic rock foothills and are shallow and well drained; the U.S. Department of Agriculture Natural Resources Conservation Service considers this soil type hydric (USDA 2016a).

The study area slopes slightly to the southwest, with a change in topography from approximately 1,380 feet above mean sea level to 1,425 feet above mean sea level. The lowest point in elevation occurs at the lake in the southwestern corner of the study area, and the highest point is in the center of the study area near the swale. There is a slight downward slope from the swale to the east.

5.3 Watershed and Hydrology

The study area is part of the Upper Coon-Upper Auburn watershed Hydrologic Unit Code 18020127 and the sub-watershed Dutch-Ravine-Auburn-Ravine Hydrologic Unit Code 180201610102. Hydrology on site has been altered over the years to channel rainwater and surface runoff through a series of storm drains. Water appears to travel from these storm drains to various detention basins located throughout the study area. Additionally, there is a constructed canal along the eastern edge of the study area that conveys water from south to north. Further discussion of these features is presented in Section 6.

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6 RESULTS OF SURVEY

6.1 Jurisdictional Delineation

The dominant vegetation community within the study area consists of California annual grassland, most of which is disturbed. The remaining on-site acreage consists primarily of mixed oak woodland and developed/disturbed habitat. Wetland features within the study area include one canal, two ephemeral drainages, several seasonal wetlands, three detention basins, one freshwater pond, and two freshwater emergent wetlands (Figure 4). The areas surrounding several of these features provide a limited amount of riparian habitat. These land cover types and wetland types are described in more detail in the following discussion.

Upland Habitats

California Annual Grassland

California annual grassland is present throughout approximately 13.76 acres of the study area. Dominant species observed on-site within the grassland community included wild oat (*Avena fatua*), ripgut brome (*Bromus diandrus*), and soft brome (*Bromus hordeaceus*). Several other native and non-native species were also present, including black mustard (*Brassica nigra*) and yellow star-thistle (*Centaurea solstitialis*).

Mixed Oak Woodland

Mixed oak woodland is present within the study area in the vicinity of Ephemeral Drainage 01 (ED-01), Ephemeral Drainage 02 (ED-02), Seasonal Wetland 01 (SW-01), and Freshwater Emergent Wetland 02 (FEW-02) (Figure 4). This included a variety of oak species and a sparse understory of vegetation. Species observed include valley oak (*Quercus lobata*), interior live oak (*Quercus wislizeni*), and blue oak (*Quercus douglasii*).

Other Waters of the United States

Ophir Canal

A single unlined canal runs through the western side of the study area along the perimeter directly adjacent to 1st Street for the majority of the project boundary. The canal flows above ground from Bell Road along 1st Street to Professional Road, where it goes underground until reemerging just south of Willow Creek Drive. The canal is approximately 1,832.33 linear feet within the study area and is approximately 8 feet wide at the OHWM and 16 feet wide at the top of the bank. The canal is classified as riverine by the National Wetland Inventory (NWI) and has an established bed and

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bank. This canal has connectivity to other waterways above and below the study area; however, it is not considered potentially jurisdictional because it is an irrigation and water service facility constructed in uplands and maintained regularly by the Nevada Irrigation District. The Nevada Irrigation District monitors and maintains vegetation growth and debris, regulates water flow through the canal, and has the ability to limit or stop flow (C. Close, personal communication, November 6, 2018). Thus, under 40 CFR 230.3 (o)(2)(iii), this canal is likely not jurisdictional.

Ephemeral Drainage 01 (ED-01)

ED-01 is approximately 161.82 linear feet and leaves the study area through a culvert adjacent to SW-01 (Figure 4). It appears that the channel collects water during storm events and transports it off site. The channel is largely unvegetated except at its termination in SW-01, where there is a very sparse herbaceous layer. The channel is bounded by an intermittent riparian zone consisting of Gooding's willow (*Salix goodingii*), Oregon ash (*Fraxinus latifolia*), and blue oak (*Quercus douglasii*). The channel at OHWM has an approximate width of 2.5 feet. The channel is approximately 7 feet wide at the top of the bank and tapers down to approximately 1 foot wide. Exposed roots, wracking, and undercut banks at the OHWM evidence flow. The substrate of the drainage was rocky and devoid of vegetation. At the time of the field survey, this feature was completely dry. Due to the likelihood that ED-01 eventually drains to a more permanent waterway downstream, this drainage is considered a non-relatively permanent water that drains to a water of the United States and is potentially jurisdictional.

Ephemeral Drainage 02 (ED-02)

ED-02 is approximately 68.85 linear feet and terminates in SW-01 (Figure 4). Similar to ED-01, it appears that the channel collects water during storm events and transports it off site. The channel is unvegetated except at its termination in SW-01, where there is a very sparse herbaceous layer. The OHWM for the channel was evidenced by an incised channel and is approximately 1 foot wide with a rocky substrate. At the time of the field survey, this feature was completely dry. This ephemeral drainage enters SW-01 and then a culvert, where it goes underground. Due to the likelihood that ED-02 drains to a more permanent waterway downstream, this drainage is considered a non-relatively permanent water that drains to a water of the United States and is potentially jurisdictional.

Wetlands

Five seasonal wetlands (SW-01 through SW-05) were identified within the study area. One is located in the northeastern part of the study area, and the other four are located within a previously developed lot near the center of the study area (Figure 4).

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Seasonal Wetland 01 (SW-01)

SW-01 is approximately 0.02 acre and is fed by water runoff from ED-01 and ED-02. This wetland is primarily discernable based on the distinct vegetation differences between the mostly barren upland and the vegetated wetland, surface soil cracks visible within the boundary of the wetland, hydric soil, and clearly evident hydrologic features leading to the wetland. Dominant plant species found within this seasonal wetland include Canada horseweed (*Erigeron canadensis*), barnyardgrass (*Echinochloa crus-galli*), and Jersey cudweed (*Pseudognaphalium luteoalbum*). Two soil pits were dug at this location: one upland and one wetland. The wetland sampling point (SP-01) contained evidence of hydric soils, hydrophytic vegetation, and hydrology (refer to Appendix C). As mentioned previously, this seasonal wetland is found at the termination of both ED-01 and ED-02. This seasonal wetland drains into a culvert where the water then goes underground. Due to the likelihood that this feature drains to a more permanent waterway downstream, this drainage is considered a wetland adjacent to a non-relatively permanent water tributary to a water of the United States and is potentially jurisdictional.

Seasonal Wetlands 02 through 05 (SW-02, SW-03, SW-04, and SW-05)

SW-02 through SW-05 are located within a vacant lot that used to contain buildings and now has constructed depressions where the buildings previously resided. The total combined acreage of these four seasonal wetlands is approximately 0.22 acre. The depressions and terraces within the vacant field are clearly visible; there is a distinct change in vegetation from the seasonal wetlands to the upland habitat surrounding them, and surface soil cracks were present within all four wetlands when surveyed. Due to the similarity of these features, a single wetland sampling point (SP-03) and a single upland sampling point (SP-04) were dug at this location and are representative of all four seasonal wetlands (Appendix C).

These seasonal wetlands were largely unvegetated during the field survey. What vegetation was present consisted of hyssop loosestrife (*Lythrum hyssopifolia*) and pale spikerush (*Eleocharis macrostachya*). The substrate in the seasonal wetlands was extremely rocky soil, likely fill from previous construction activity. The fill appeared to have acted as an impermeable layer, causing the seasonal wetlands to develop similar hydrology to vernal pools. In SW-03, the biologists observed a biotic crust of copepod carapaces, and in SW-04, biologists observed a layer of dried filamentous algae. The presence of aquatic invertebrates and a remnant algal mat indicates that these pools pond for sufficient lengths of time to support aquatic wildlife.

These seasonal wetlands present similarly to vernal pools, which are considered special aquatic sites as described in Section 230.3(q-1) of Section 404 of the CWA; therefore, these seasonal wetlands are potentially jurisdictional.

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Vegetated Swale

A single vegetated swale that is 106.59 linear feet was observed in the center of the study area. There was no distinct change in vegetation from surrounding upland to swale, and it did not have a defined bed and bank. Plant species identified include Italian rye grass (*Festuca perennis*), Bermudagrass (*Cynodon dactylon*), seaside barley (*Hordeum marinum*), and smooth cat's ear (*Hypochaeris glabra*). Water potentially pools in the swale during rain events, but not for sufficient periods for hydrophytic vegetation, hydric soils, or hydrology to form. Thus, this feature is likely not jurisdictional.

Detention Basins 01 through 03 (DB-01, DB-02, and DB-03)

Three detention basins are present within the study area (Figure 4). The first is located adjacent to 1st Street on the western side of the study area (DB-01). DB-01 is approximately 0.18 acre and has an outlet in the center. Vegetation within DB-01 was dominated by species similar to those described for California annual grassland. The grassland species were replaced by broadleaf cattail (*Typha latifolia*), willow (*Salix* sp.), and Fremont cottonwood (*Populus fremontii*) deeper into the basin near the outlet. Standing water was present in a channel at the deepest portion of the basin during the site survey. The deepest portion of the basin appears to hold water longer than the surrounding area and functions as a seasonal wetland.

DB-02 is 0.62 acres and is located below Willow Road in the southeastern portion of the study area. This detention basin has an outlet leading directly to the adjacent canal at the southeastern corner of the basin; an inlet at the northwestern corner of the basin appears to channel rainwater runoff from the surrounding area to the detention basin. A small area at the inlet pipe contains water for longer periods, functioning as a seasonal wetland. This area contained hydrophytic vegetation at the time of the survey, including tall flatsedge and analogue sedge (*Carex simulata*). The basin floor was dominated by Italian rye grass, and species identified by the outlet included Fremont cottonwood, coyotebrush (*Baccharis pilularis*), valley oak, and interior live oak. This location is characterized as a freshwater pond by the NWI and is classified as palustrine, unconsolidated bottom, and permanently flooded under the Cowardin code (USFWS 2016b); however, during the field survey, the location was not flooded and functioned as a detention basin and not a freshwater pond.

DB-03 is 0.12 acre and is located directly to the west of DB-02 across 1st Avenue in the southeastern portion of the study area. This detention basin was dominated by California annual grassland, with a single Fremont cottonwood in the center of the basin. There was a central drain in this detention basin that likely drains directly into the adjacent canal. This location is characterized as a freshwater pond by the NWI and is classified as palustrine, unconsolidated

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bottom, and permanently flooded under the Cowardin code (USFWS 2016b); however, during the field survey, the location was not flooded, did not contain hydrophytic vegetation, and functioned as a seasonally flooded detention basin and not a freshwater pond. This feature is unlikely to be considered jurisdictional.

The detention basins could potentially drain into the adjacent canal, which would make any wetlands associated with DB-01 and DB-03 potentially jurisdictional.

Freshwater Pond

A single freshwater pond is located in the southwestern corner of the study area south of B Avenue and is surrounded by undeveloped land on the southern and western sides and ongoing development on the eastern side. The pond is 2.95 acres and is classified under the Cowardin code as palustrine, unconsolidated bottom, and permanently flooded (USFWS 2016b). Water was present in this feature at the time of the field survey. Species observed included willow, Fremont cottonwood, broadleaf cattail, floating primrose-willow (*Ludwigia peploides*), and common rush (*Juncus effusus*). This pond appears to drain south into additional freshwater wetlands and eventually into riverine habitat; due to this connectivity, this pond is potentially jurisdictional.

Freshwater Emergent Wetland 01 (FEW-01)

FEW-01 is a linear wetland feature located north of the freshwater pond across B Avenue and consists of 147.75 linear feet within the study area. This wetland drains directly into the freshwater pond through a large culvert. Species observed included willow, Fremont cottonwood, broadleaf cattail, floating primrose-willow, and common rush. This wetland is classified in the NWI as freshwater emergent wetland and as palustrine, emergent, and temporarily flooded under the Cowardin code (USFWS 2016b). At the time of the field survey, the soil within the wetland was saturated and there was a minimal amount of standing water. This wetland drains directly into the freshwater pond below and is potentially jurisdictional.

Freshwater Emergent Wetland 02 (FEW-02)

FEW-02 is located in the southwestern portion of the study area directly below the freshwater pond; is 0.43 acre in size; and is classified as palustrine, scrub-shrub, and seasonally flooded under the Cowardin code (USFWS 2016b). The wetland is heavily forested and dominated by broadleaf cattail. The wetland appears to potentially drain south into additional wetlands identified by the NWI (USFWS 2016a). Due to the high likelihood of connectivity, this wetland is potentially jurisdictional. No work is anticipated to take place in the vicinity of this wetland for this project.

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6.2 Jurisdictional Wetlands and Waters

The study area does not support TNWs, interstate waters, or waters that support interstate commerce (33 CFR 328.3(a) parts 1–4); therefore, potential ACOE jurisdiction was determined based on connectivity or adjacency to off-site waters of the United States (CFR 328.3(a) part 5).

Figure 4 depicts the geographic extent of wetland features within the study area, and Table 1 includes the total acreage of wetland features. An aquatic resources table in accordance with ACOE format is presented in Appendix D.

Table 1
Wetlands and Waters within the Study Area

Feature	Jurisdiction	Acres	Linear Feet
<i>Wetlands</i>			
Seasonal Wetland 01	Jurisdictional	0.02	N/A
Seasonal Wetland 02	Jurisdictional	0.02	N/A
Seasonal Wetland 03	Jurisdictional	0.09	N/A
Seasonal Wetland 04	Jurisdictional	0.09	N/A
Seasonal Wetland 05	Jurisdictional	0.02	N/A
Vegetated Swale	Non-jurisdictional	N/A	106.59
Detention Basin 01	Jurisdictional	0.18	N/A
Detention Basin 02	Non-jurisdictional	0.62	N/A
Detention Basin 03	Jurisdictional	0.12	N/A
Freshwater Pond	Jurisdictional	2.95	N/A
Freshwater Emergent Wetland 01	Jurisdictional	N/A	147.75
Freshwater Emergent Wetland 02	Jurisdictional	0.43	N/A
Total		4.54	254.34
<i>Other Waters</i>			
Ophir Canal	Non-jurisdictional	N/A	1,832.33
Ephemeral Drainage 01	Jurisdictional	N/A	161.82
Ephemeral Drainage 02	Jurisdictional	N/A	68.85
Total		N/A	2,063.00

Note: N/A = not applicable

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Data Stations

Vegetation, hydrology, and soils were examined at eight sampling points within the study area to determine the extent of potentially jurisdictional resources (Figure 4).

The vegetation in upland data points consisted of dry annual grasses and low-growing herbaceous vegetation. Drought conditions prevalent in previous years in California may have contributed to the composition of vegetation in the study area. Additionally, soils were influenced by human activity; rocky fill material was present at two of the eight locations. Table 2 lists the results of these data stations in terms of the three criteria that determine jurisdiction: vegetation, hydrology, and soils. For more detailed information regarding the presence or absence of wetland indicators, refer to the completed ACOE data sheets in Appendix C.

Table 2
Jurisdictional Data Station Results

Data Station	Wetland Vegetation	Wetland Hydrology	Wetland Soils	Determination
SP-01	Present	Present	Present	Jurisdictional
SP-02	Absent	Absent	Absent	Non-jurisdictional
SP-03	Present	Present	Present	Jurisdictional
SP-04	Absent	Absent	Absent	Non-jurisdictional
SP-05	Present	Present	Present	Jurisdictional
SP-06	Absent	Absent	Absent	Non-jurisdictional
SP-07	Present	Present	Present	Jurisdictional
SP-08	Present	Absent	Absent	Non-jurisdictional

Note: SP = sampling points

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7 CONCLUSIONS

The study area supports a total of 4.54 acres of wetlands and 230.67 linear feet of other waters that are anticipated to meet the criteria for jurisdictional waters of the United States, including wetlands based on an analysis of the three parameters for wetlands (soils, hydrology, and vegetation), and connectivity/proximity to known waters of the United States.

All features identified during the field survey are potentially jurisdictional with the exception of the vegetated swale that is likely not jurisdictional and is not included in the calculations.

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8 REFERENCES CITED

33 CFR 328.1–328.5. Definition of Waters of the United States.

51 FR 41217. Final Rule. “Migratory Bird Rule.” November 13, 1986.

ACOE (U.S. Army Corps of Engineers). 1987. *Corps of Engineers Wetland Delineation Manual*. Online ed. Environmental Laboratory, Wetlands Research Program Technical Report Y-87-1. Vicksburg, Mississippi: U.S. Army Engineer Waterways Experiment Station. January 1987. Accessed June 2015. http://www.fedcenter.gov/Bookmarks/index.cfm?id=6403&pge_id=1606.

ACOE. 2008a. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)*. Environmental Laboratory, ERDC/EL TR-08-28. Vicksburg, Mississippi: U.S. Army Engineer Research and Development Center. September 2008. Accessed June 2012. <http://el.erdcl.usace.army.mil/elpubs/pdf/trel08-28.pdf>.

ACOE. 2008b. *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States*. Accessed August 2016. <http://www.dtic.mil/dtic/tr/fulltext/u2/a486603.pdf>.

Bing Maps. 2016. [aerial photograph]. 1:200 scale.

California Water Code, Section 13000–16104. Porter-Cologne Water Quality Control Act, as amended. Prepared by the State Water Resources Control Board, with additions and amendments (shown as tracked changes) effective January 1, 2011. Accessed January 17, 2011. http://www.swrcb.ca.gov/laws_regulations/.

Close, C. 2018. Phone conversation between Chip Close, Operations Manager for Nevada Irrigation District with Laura Burris of Dudek. November 6, 2018

Google Earth. 2016. [aerial photograph]. 1:200 scale.

Jepson Flora Project. 2016. *Jepson eFlora*. Berkeley, California: University of California. Accessed April 2016. http://ucjeps.berkeley.edu/cgi-bin/get_JM_name_data.pl.

Rapanos et ux., et al. v. United States. 547 U.S. 715 (2006); no. 04-1034. Supreme Court decision on *Rapanos v. United States* and *Carabell v. U.S. Army Corps of Engineers*. Accessed January 9, 2012. http://www.epa.gov/owow/wetlands/pdf/Rapanos_SupremeCourt.pdf.

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Solid Waste Agency of Northern Cook County v. United States Corps of Engineers et al., 531 U.S. 159 (2001), no. 99–1178.

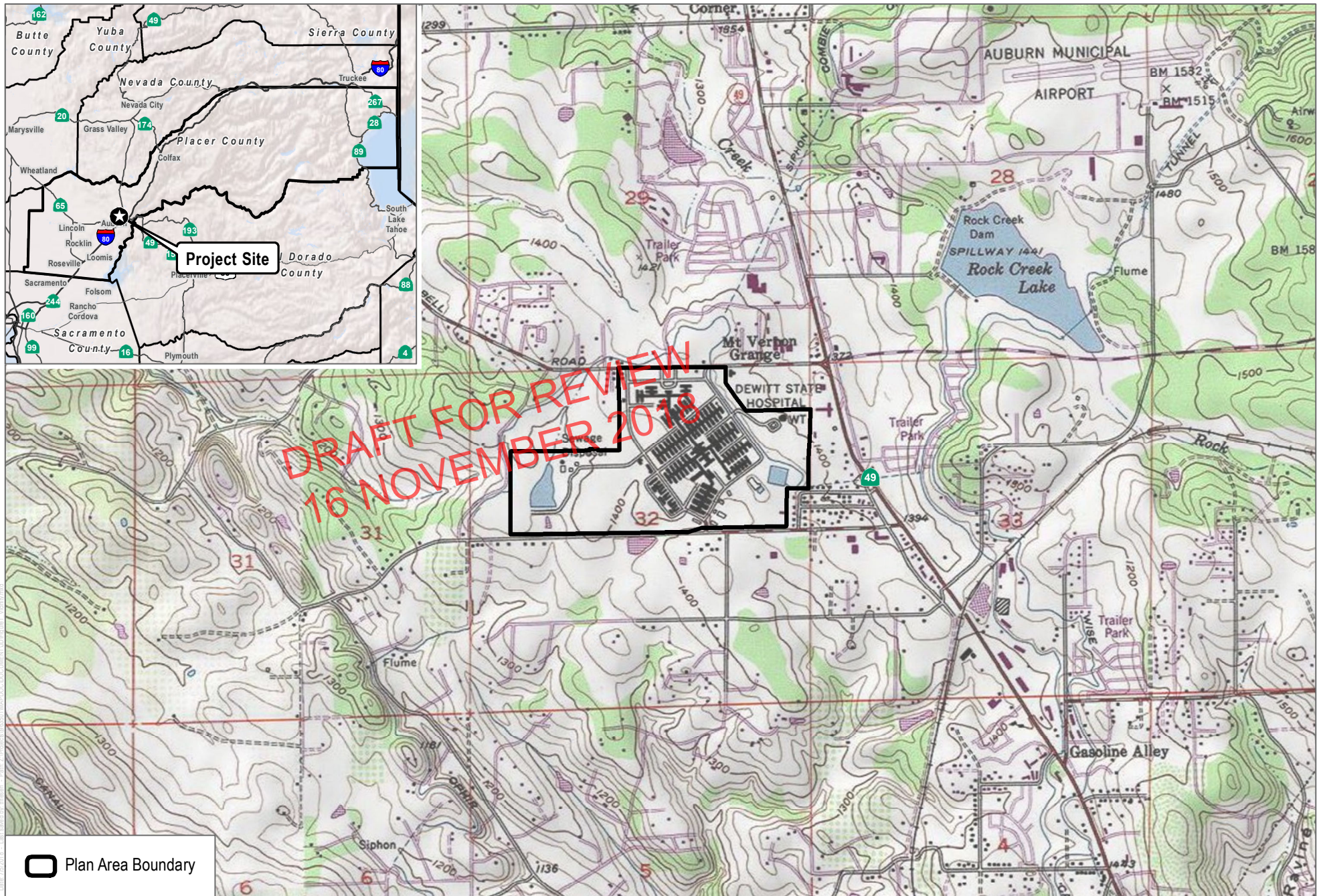
USDA (U.S. Department of Agriculture). 2016a. Web Soil Survey. USDA Natural Resources Conservation Service, Soil Survey Staff. Accessed March 25, 2015.
<http://websoilsurvey.nrcs.usda.gov/>.

USDA. 2016b. PLANTS database. USDA Natural Resources Conservation Service. Last updated August 15, 2016. Accessed August 2016. <http://plants.usda.gov/java/>.

USFWS (U.S. Fish and Wildlife Service). 2016a. *National Wetlands Inventory*. Accessed August 2016. fws.gov/wetlands/NWI/index.html.

USFWS. 2016b. “Wetland Classification Codes.” Last updated July 26, 2016. Accessed August 2016. <https://www.fws.gov/wetlands/Data/Wetland-Codes.html>.

USGS (U.S. Geological Survey). 2016. “Auburn, CA” [map]. 7.5-Minute Series (Topographic). Accessed August 2016. http://store.usgs.gov/b2c_usgs/b2c/usgs/netfile?file=//igskahcigssap05/MOD/StoreFiles/DenverPDFs/24K/CA/CA_Auburn_1981.pdf.



SOURCE: USGS 7.5-Minute Series Auburn Quadrangle

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SOURCE: ESRI 2018, County of Placer 2016

FIGURE 2
Project Site

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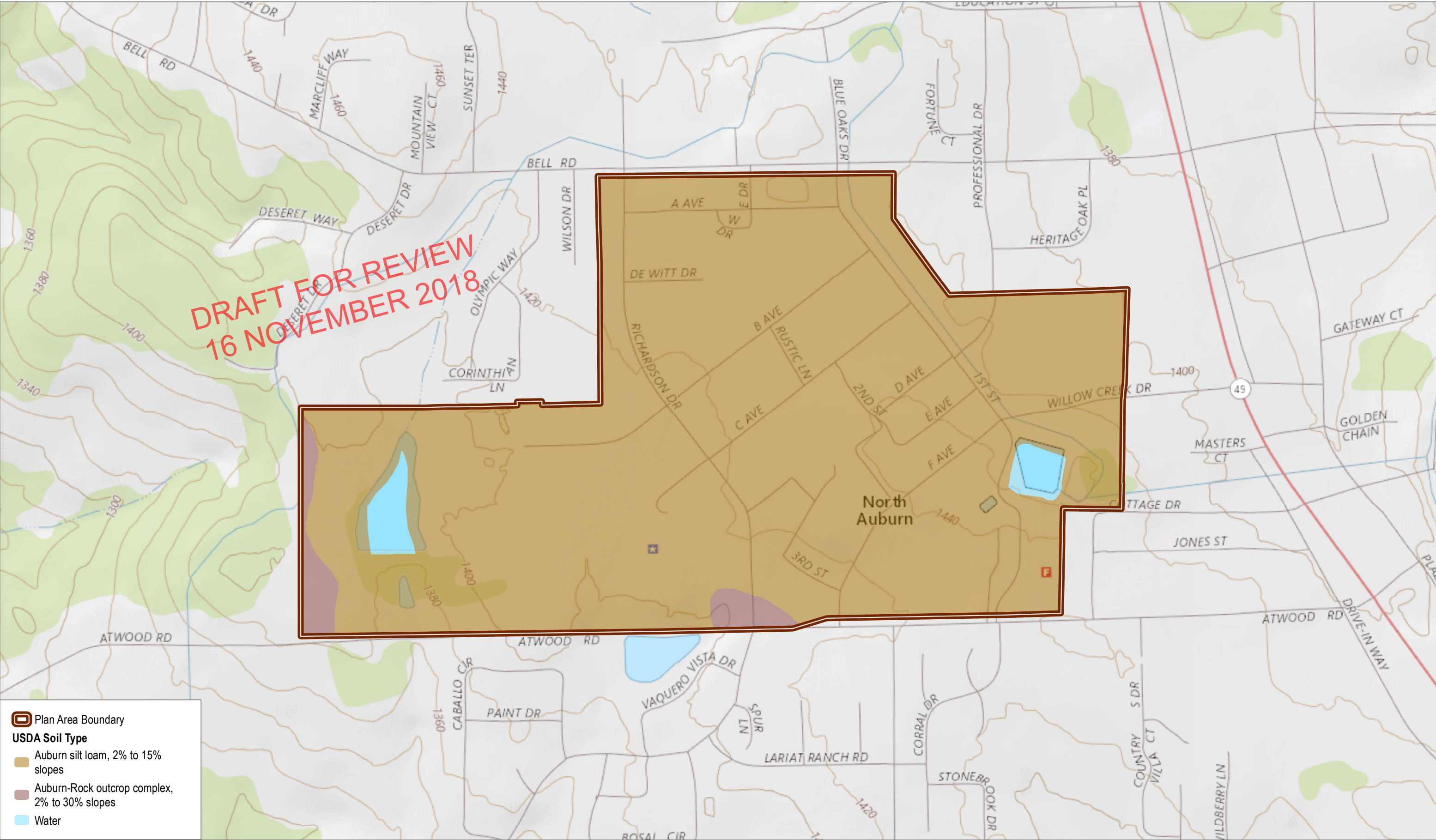


FIGURE 3
Soils

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FIGURE 4

Potentially Jurisdictional Features

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APPENDIX A

Representative Photos

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APPENDIX A Representative Photos



A photograph showing a narrow, straight canal filled with water, bordered by dry, brownish soil. Trees line the left side, and a road with a car is visible on the right. A large red watermark is overlaid diagonally across the center of the image.

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Photo 1: View of Ophir Canal, facing southeast. August 10, 2016



Photo 2: Ephemeral Drainage 01 (ED-01), facing east. August 10, 2016.

APPENDIX A (Continued)



Photo 3: Seasonal Wetland 01 (SW-01) and ED-01, facing west. August 10, 2016.



Photo 4: Seasonal Wetland 02 (SW-02), looking south. August 10, 2015

APPENDIX A (Continued)



Photo 5: Seasonal Wetland 04 (SW-04) with filamentous algae crust, facing south. August 10, 2016.

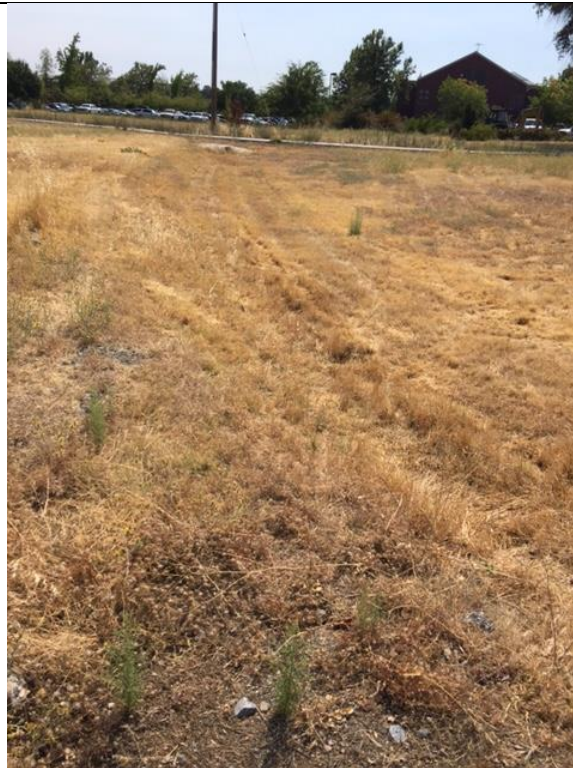


Photo 6: Vegetated swale, facing southwest. August 10, 2016.

APPENDIX A (Continued)

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Photo 7: Detention Basin 01 (DB-01), facing southeast. August 10, 2016.



Photo 8: Detention Basin 02 (DB-02), facing northeast. August 10, 2015.

APPENDIX A (Continued)



Photo 9: Freshwater pond and surrounding riparian vegetation, looking south. August 10, 2016.



Photo 10: Freshwater Emergent Wetland 01 (FEW-01), facing northwest. August 10, 2016.

APPENDIX A (Continued)

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APPENDIX B

Plant Species Observed

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APPENDIX B

Plant Species Observed

VASCULAR SPECIES

GYMNOSPERMS AND GNETOPHYTES

PINACEAE—PINE FAMILY

Pinus sabiniana—California foothill pine (NL)

MONOCOTS

POACEAE—GRASS FAMILY

- * *Avena fatua*—wild oat (NL)
- * *Bromus diandrus*—ripgut brome (NL)
- * *Bromus hordeaceus*—soft brome (FACU)
- * *Cynodon dactylon*—Bermudagrass (FACU)
- * *Echinochloa crus-galli*—barnyardgrass (FACW)
- * *Festuca arundinacea*—tall fescue (NL)
- * *Festuca perennis*—Italian ryegrass (FAC)
- * *Hordeum marinum*—seaside barley (FAC)

TYPHACEAE—CATTAIL FAMILY

Typha angustifolia—narrowleaf cattail (OBL)

Typha latifolia—broadleaf cattail (OBL)

EUDICOTS

ASTERACEAE—SUNFLOWER FAMILY

- Baccharis pilularis*—coyotebrush (NL)
- * *Carduus pycnocephalus*—Italian plumeless thistle (NL)
- * *Centaurea solstitialis*—yellow star-thistle (NL)
- * *Hypochaeris glabra*—smooth cat's ear (NL)
- * *Lactuca serriola*—prickly lettuce (FACU)
- * *Pseudognaphalium luteoalbum*—Jersey cudweed (FAC)

BRASSICACEAE—MUSTARD FAMILY

- * *Brassica nigra*—black mustard (NL)

CHENOPODIACEAE—GOOSEFOOT FAMILY

- * *Salsola australis*—Russian thistle (NL)

APPENDIX B (Continued)

EUPHORBIACEAE—SPURGE FAMILY

Croton setiger—dove weed (NL)

FABACEAE—LEGUME FAMILY

Acmispon americanus—no common name (UPL)

* *Trifolium glomeratum*—clustered clover (NL)

* *Trifolium hirtum*—rose clover (NL)

* *Vicia villosa*—winter vetch (NL)

FAGACEAE—OAK FAMILY

Quercus douglasii—blue oak (NL)

Quercus lobata—valley oak (FACU)

Quercus wislizeni—interior live oak (NL)

GERANIACEAE—GERANIUM FAMILY

* *Erodium cicutarium*—redstem stork's bill (NL)

LYTHRACEAE—LOOSESTRIFE FAMILY

* *Lythrum hyssopifolia*—hyssop loosestrife (OBL)

OLEACEAE—OLIVE FAMILY

Fraxinus latifolia—Oregon ash (FACW)

ONAGRACEAE—EVENING PRIMROSE FAMILY

Epilobium ciliatum—fringed willowherb (FACW)

* *Ludwigia peploides*—floating primrose-willow (OBL)

PLANTAGINACEAE—PLANTAIN FAMILY

* *Plantago lanceolata*—narrowleaf plantain (FAC)

PLATANACEAE—PLANE TREE, SYCAMORE FAMILY

* *Platanus × hispanica*—London planetree (NL)

POLYGONACEAE—BUCKWHEAT FAMILY

* *Rumex crispus*—curly dock (FAC)

ROSACEAE—ROSE FAMILY

* *Rubus armeniacus*—Himalayan blackberry (FAC)

APPENDIX B (Continued)

SALICACEAE—WILLOW FAMILY

Salix exigua—narrowleaf willow (FACW)

Salix gooddingii—Goodding's willow (FACW)

Salix laevigata—red willow (FACW)

Salix lasiandra—Pacific willow (FACW)

Populus fremontii—Fremont cottonwood (FAC)

* signifies introduced (non-native) species

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APPENDIX B (Continued)

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APPENDIX C

Data Sheets

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APPENDIX D

Aquatic Resources Spreadsheet

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